

## CLAIMS

We claim:

1. Apparatus comprising:

a financial transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one transaction function device, whereby a merchant user adjacent to the merchant user side of the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor being in operative connection with the imaging device, the audio input device, and the transaction function device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals to resolve first identity data, and the processor is operative responsive to the audio input signals to resolve second identity data, and wherein the processor is operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the transaction function device when the level of correlation is reached.

2. The apparatus according to claim 1 wherein the machine includes a sensing device, wherein the sensing device is operative to sense the merchant user in proximity to the machine, and wherein the sensing device is in operative connection with the processor, and wherein the processor is operative to resolve the first identity data responsive to the sensing device sensing the merchant user in proximity to the machine.
3. The apparatus according to claim 1 wherein the machine includes an output device, and wherein the output device is in operative connection with the processor, and wherein the processor is operative to prompt the merchant user to speak through prompt outputs presented through the output device, whereby when the merchant user speaks audio input signals are generated.
4. The apparatus according to claim 3 wherein the output device includes a display.
5. The apparatus according to claim 3 wherein the output device includes a speaker.

6. The apparatus according to claim 5 wherein the data store further includes audio output data corresponding to audio outputs, and wherein the output device prompts the merchant user through audio messages.

7. The apparatus according to claim 1 wherein the machine further comprises an output device and a manually actuatable input device and wherein when the level of correlation is not reached the processor is operative to prompt a merchant user through the output device to operate the manually actuatable input device.

8. The apparatus according to claim 7 wherein the manually actuatable input device includes a card reader, wherein the merchant user is prompted to input a machine readable card associated with the merchant user in the card reader.

9. The apparatus according to claim 8 wherein the merchant user data further includes account data wherein the account data includes at least one account associated with each merchant user, and wherein the machine readable card includes account identifying data corresponding to an account associated with the merchant user of the card, and wherein the card reader provides card input signals responsive to reading the card, and wherein the processor is operative to resolve the account of the merchant user responsive to the account identifying data.

10. The apparatus according to claim 9 wherein the machine includes a keypad, and wherein the processor is operative responsive to resolving the merchant user account data to operate the output device to prompt the merchant user to input a code at the keypad, wherein the keypad generates keypad input signals responsive to the merchant user inputting the code at the keypad, and wherein the processor is operative to enable merchant user operation of the transaction function device responsive to the keypad input signals corresponding to input by the merchant of a predetermined code.

11. The apparatus according to claim 1 wherein the transaction function device includes a currency dispenser.

12. The apparatus according to claim 1 and further comprising an input terminal in operative connection with the processor, wherein the input terminal includes a further imaging device and a further audio input device, wherein the merchant user image data and user voice data is input through the input terminal.

13. The apparatus according to claim 1 wherein the machine includes a sensing device, wherein the sensing device is operative to sense the merchant user in proximity to the machine and wherein the sensing device is in operative connection with the processor, and wherein the processor is operative to cease merchant user operation of the transaction function device responsive to the sensing device ceasing to sense the merchant user in proximity to the machine.

14. A method of operation of an apparatus comprising the steps of:  
providing a financial transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening,

5 storing in a data store in operative connection with a processor, merchant user data for a plurality of merchant users, said merchant user data including:

identity data corresponding to an identity of each merchant user;

image data corresponding to an appearance feature of each merchant user; and

voice data corresponding to a voice feature of each merchant user;

and thereafter in any order further comprising the steps of:

acquiring with an imaging device on the transaction machine an appearance feature of a merchant user adjacent to the machine;

resolving first user identity data with said processor from said appearance feature and the image data in the data store;

receiving with an audio input device on the transaction machine a voice feature of the merchant user adjacent the machine;

further resolving second user identity data with the processor from the voice feature and the voice data in the data store;

5 and thereafter further comprising:

comparing the first and second user identity data with the processor to determine if such data corresponds to a single merchant user; and

enabling merchant user operation of a transaction function device on the machine when the first and second identity data corresponds to a single merchant user.

10 15 The method according to claim 14 wherein the storing step further comprises storing for each of a plurality of merchant users manual input data, and wherein if in the comparing step the first and second identity data do not correspond to a single merchant user, and before the enabling step further comprising the steps of:

15 prompting the merchant user through an output device at the machine to make an input through a manually actuatable input device on the machine; and

further comparing the data input by the merchant user through the input device to manual input data in the data store, wherein correspondence of the data resolves the identity of a single merchant user.

16. The method according to claim 14 wherein the storing step comprises prompting a merchant user through an input terminal to provide at least one of the image data or voice data.

17. The method according to claim 14 wherein the financial transaction machine further includes a sensing device wherein the sensing device enables sensing the merchant user in proximity to the machine, and further comprising the step of preventing merchant user operation of the transaction function device responsive to the merchant user ceasing to be sensed in proximity to the machine.

18. Apparatus comprising:

a transaction machine, the machine including a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, the machine further including a characteristic input device for sensing at least one of a physical or vocal feature of a merchant user adjacent the machine, a manual input device, and a transaction function device;

a processor in operative connection with a data store, the processor in operative connection with the characteristic input device and the manual input device, and wherein the data store includes for each of a plurality of authorized merchant users, feature data representative of the feature associated with the merchant user, and input data associated with a manual input corresponding to the merchant user, and wherein the processor is operative to determine if feature data input through the characteristic input device by a merchant user in proximity to the machine corresponds to feature data associated with one of the plurality of authorized merchant users, and if so to enable merchant user operation of the transaction function device; and if not, to determine if manual input by the merchant user through the manual input device on the machine corresponds to the input data associated with one of the plurality of authorized merchant users and if so to enable merchant user operation of the transaction function device.

19 The apparatus according to claim 18 wherein the feature data includes data representative of both physical and vocal features of a plurality of authorized merchant users, and wherein the feature of the merchant user at the machine must correspond to both the physical and vocal data of one authorized merchant user, and wherein upon such correspondence the transaction function device is enabled to be operated.



20. The apparatus according to claim 19 wherein the manual input device includes a card reader, whereby the card reader reads a card including identifying card data corresponding to a merchant user.

21. The apparatus according to claim 20 wherein the manual input device further includes a keypad, wherein the merchant user is enabled to input a code corresponding to the merchant user through the keypad, and wherein the transaction function device is enabled to be operated when the code and the identifying card data both correspond to the authorized merchant user.

22. The apparatus according to claim 18 wherein the machine includes an audio output device, and wherein the audio output device is in operative connection with the processor, wherein the processor operates the audio output device to prompt the merchant user to provide an input.

23. The apparatus according to claim 22 and further comprising a suppression input device, wherein the merchant user is selectively enabled to suppress operation of the audio output device, whereby a merchant user is enabled to selectively conduct a silent transaction.

24. The apparatus according to claim 23 wherein the processor is operative responsive to selection of the suppression device to store feature data concerning the merchant user in the data store.

25. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals to resolve first identity data, and the processor is operative responsive to the audio input signals to resolve second identity data, and wherein the processor is operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the dispenser device when the level of correlation is reached.

26. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes stored merchant user data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the stored merchant user data for a plurality of users and the image input signals to resolve first identity data, and the processor is operative responsive to the stored merchant user data for a plurality of users and the audio input signals to resolve second identity data, and wherein the processor is

operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the dispenser device when the level of correlation is reached.

27. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes stored merchant user data corresponding to a plurality of authorized merchant users, the merchant user data for each merchant user including image data corresponding to an appearance feature of the merchant user and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals, the audio input signals and the stored merchant user data for a plurality of merchant users, to resolve identity data, and where when the resolved identity data corresponds to one of the authorized merchant users the processor enables merchant user operation of the dispenser device.

28. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one output device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the output device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals and the audio input signals to resolve merchant user identity data corresponding to a particular merchant user to operate the output device.

29. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes at least one of an imaging device providing image input signals or an audio input device providing audio input signals, the machine further including at least one output device;

a processor, the processor in operative connection with the at least one imaging device or audio input device, and the output device, the processor also being in operative connection with a data store, wherein the data store includes user data corresponding to a plurality of merchant users, the user data for each merchant user including identity data corresponding to the merchant user, and at least one of image data corresponding to an appearance feature of the merchant user or voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to at least one of the image input signals or the audio input signals, and the stored user data, to resolve user identity data

corresponding to a particular merchant user to enable the output device to provide at least one output.

30. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes at least one of an imaging device providing image input signals or an audio device providing audio input signals, the machine further including at least one transaction function device;

a processor, wherein the processor is in operative connection with the at least one imaging device or audio input device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, at least one of image data corresponding to an appearance feature of the merchant user or voice data corresponding to a voice feature of the merchant user; and

wherein the processor is operative responsive to at least one of the image input signals or audio input signals to determine if a user causing the image or audio input signals to be generated is an authorized merchant user, and if so, to enable merchant user operation of the transaction function device.

31. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals and a transaction function device;

a processor, wherein the processor is in operative connection with the imaging device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, image data corresponding to an appearance feature of the merchant user; and

wherein the processor is operative responsive to the image input signals to determine if a user causing the image input signals is an authorized merchant user, to enable the authorized merchant user operation of the transaction function device.

32. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant



user side includes a sheet opening, wherein the machine further includes an audio input device providing audio input signals and a transaction function device;

a processor, wherein the processor is in operative connection with the audio input device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, voice data corresponding to a voice feature of the merchant user; and

wherein the processor is operative responsive to the audio input signals to determine if a user causing the audio input signals is an authorized merchant user, to enable the authorized merchant user operation of the transaction function device.

33. The apparatus according to claim 30 and further comprising:

a chest portion, wherein the chest portion includes a first side corresponding to the customer user side and a second side corresponding to the merchant user side;

a sheet inlet opening in the merchant user side of the chest portion;

a first sheet outlet opening in the merchant user side of the chest portion; and

a second sheet outlet opening in the customer user side of the chest portion.

34. The apparatus according to claim 33 and further comprising:

a housing in supporting connection with the chest portion;

a customer interface in supporting connection with the housing; and

a merchant user interface in supporting connection with the housing.

35. The apparatus according to claim 34 wherein the chest portion comprises a sheet storage area.

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